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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,715	11/05/2003	Michael S. Head	09987-00002	8885

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EXAMINER

FITZGERALD, JOHN P

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,715

Applicant(s)

HEAD ET AL.

Examiner

John P. Fitzgerald

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 1-6,9,10,13-19,22,23 and 27 is/are rejected.
- 7) ☒ Claim(s) 7,8,20 and 24-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 May 2005 has been entered.
2. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Response to Arguments

3. In response to applicant's argument that the Examiner has failed to present a *prima facie* case of obviousness in the combination of the Briggs and Moura references, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the Briggs reference clearly discloses an apparatus and method of testing individual (i.e. one-at-a-time, singularly) natural plant products (fruit, vegetables, consumables, etc.) (note: cork is a natural, not synthetic product). The testing is performed 'automatically,' where in the individual natural plant products are introduced, and subsequently 'sniffed' with an 'electronic nose' (i.e. electronic gas sensor (20), a semiconductor sensor whose conductivity increases in the presence of reducing compounds including combustible gases (i.e. analytes) such as hydrogen, carbon, monoxide, methane and propane, as well as many other volatile (i.e. substance that) or 'sniffer' that is calibrated to take a sample of surface gas (or gasses). The motivation is quite clear, to test if the natural plant products are 'saleable,' i.e. an indication of the 'condition' of the natural plant products. The Moura reference (as well as all of the Applicant's submitted Exhibits A-E), clearly indicated that cork stoppers (a natural plant product employed with consumable products, such as wine) are tested for the presence of the analyte TCA (note: TCA is a volatile substance, and thus obvious to provide a sensor capable of measuring/testing for its presence), and that the presence of TCA is clearly undesirable, causing "off aromas" (also known as 'wine taint') thus clearly providing the

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motivation of employing any type of measuring and testing technique, automatic or otherwise, for its presence, including the Briggs reference. The Examiner respectfully submits this more than meets the *prima facie* case of obviousness, especially regarding the testing of natural plant products (i.e. cork) for the presence of undesirable analytes, thus making them “unsaleable.”

4. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). As pointed out above, Moura reference clearly teaches that the presence of TCA in cork stoppers creates “off aromas” (i.e. wine taint), and as such, a highly undesirable analyte within the cork, thus providing a clear motivation to test cork stoppers for its presence, employing any known technique, including the Briggs reference.

Claim Rejections - 35 USC § 103

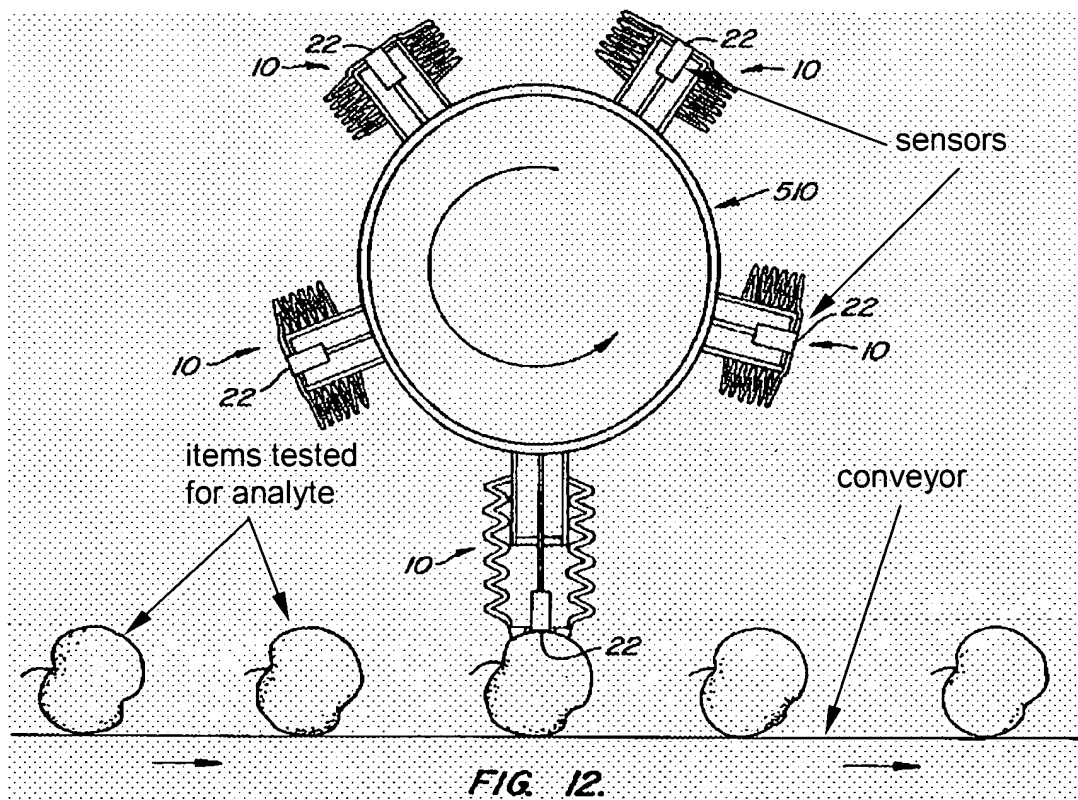
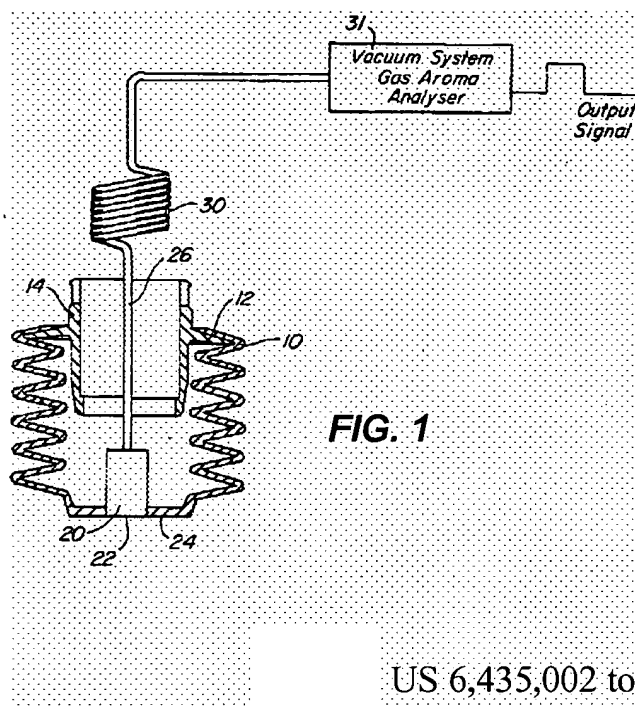
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,435,002 to Briggs and WO 3041927 A1 to Moura et al. Briggs discloses a method of testing a first item and a second item for the presence of analyte (Figs. 1 and 12) comprising the all of the steps of moving first and second items into and out of first and second positions while moving

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first and second sensors (20) (electronic noses/sniffers, as recited in claim 4, Briggs col. 4, line 19) into and out of first and second positions, the sensors operatively configured to detect the presence of the analyte in the first and second items (as recited in steps (a) through (h) of claim 1) (Briggs: col. 4, lines 4-32 and col. 6, lines 40-51); wherein the determination of the presence of the analyte via the sensor includes moving/blowing/drawing (note: movement of fluid, either blowing/drawing are relative terms) a fluid from the first item to the first sensor (as recited in claims 5 and 6) (Briggs: col. 3, lines 61-67), wherein the sensor is placed in communication with sensor electronics (31) (as recited in claim 7). Briggs further discloses that the electronic nose/sniffer can be made to sense many types of analytes (Briggs: col. 4, lines 13-34). Briggs does not expressly disclose the testing of cork stoppers for the presence of an analyte, wherein the analyte is TCA (as recited in claims 1, 3 and 4). Moura et al. teach the testing of cork stoppers for the presence/removal of a TCA analyte by passing a gas flow over the cork stoppers and the moving/turning of the stoppers several times to ensure the stoppers are exposed to the gas flow (Moura et al.: page 7, lines 24-28). It would have been obvious to one having ordinary skill in the art at the time the invention was made to test cork stoppers for the presence of TCA, as taught by Moura et al., utilizing the apparatus and method steps disclosed by Briggs, thus testing for the contamination of the cork stoppers for 2,4,5-trichloroanisole (TCA), reducing the sensory characteristics (i.e. "off aromas") damaging the wine in which the corks are utilized (Moura et al.: page 1, lines 10-27). Lastly, in specific regards to claim 2, items can be tested in batches or any desired amount by one of ordinary skill in the art based on testing/design choices and/or standard lot acceptance methods.

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7. Claims 9 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,435,002 to Briggs and WO 3041927 A1 to Moura et al. Briggs discloses a method for testing fruit and vegetables for the presence of an analyte (Figs. 1 and 12) comprising the steps of: a) providing an electronic nose/sniffer (Briggs col. 4, line 19) operatively configured for detecting the presence of an analyte (Briggs: col. 4, lines 4-32); b) moving the fruit/vegetable to a first position; c) causing a fluid to move a portion of the analyte, if present, from the fruit/vegetable to the electronic nose; and d) sensing via the electronic nose whether the analyte is present (Briggs: col. 3, lines 61-67). Briggs further discloses that the electronic nose/sniffer can be made to sense many types of analytes (Briggs: col. 4, lines 13-34). Briggs does not expressly disclose the testing of cork stoppers for the presence of an analyte, wherein the analyte is TCA (as recited in claims 9 and 10). Moura et al. teach the testing of cork stoppers for the presence/removal of a TCA analyte (an agent leading to wine taint) by passing a gas flow over the cork stoppers and the moving/turning of the stoppers several times to ensure the stoppers are exposed to the gas flow (Moura et al.: page 7, lines 24-28). It would have been obvious to one having ordinary skill in the art at the time the invention was made to test cork stoppers for the presence of TCA, as taught by Moura et al., utilizing the apparatus and method steps disclosed by Briggs, thus testing for the contamination of the cork stoppers for 2,4,5-trichloroanisole (TCA), reducing the sensory characteristics (i.e. "off aromas") damaging the wine in which the corks are utilized (Moura et al.: page 1, lines 10-27).

8. Claims 13-17, 22, 23 and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,435,002 to Briggs and WO 3041927 A1 to Moura et al. Briggs discloses an apparatus for testing each one of a plurality of items for the presence of an analyte (Figs. 1 and

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12) having: a) a plurality of sensors (20) (electronic noses/sniffers, as recited in claim 14, Briggs col. 4, line 19) each operatively configured for detecting the analyte (Briggs: col. 4, lines 4-32); b) a first system that moves the plurality of items, in seriatim, to a first position; c) a second system that moves each one of the plurality of recycled/re-used sensors (as recited in claim 22) (note: as to claim 23, employment of single-use sensors in an obvious variant), in seriatim, to a second position located proximate the first position; and d) a controller to control the second system to move the plurality of sensors to the second position each time the first system moves one of the plurality of items into the first position (note: a controller is an inherent feature of the system depicted Fig. 12, including means of diverting (i.e. accepting/rejecting) selected items, of the plurality of items from the first system conveyor (as recited in claim 17) means after testing for the presence of the analyte (as recited in claim 16) (Briggs: col. 4, lines 7-12) which can operate at speeds of 750-1,000 items; a third system for moving/blowing/drawing fluid to move at least a portion of the analyte when from the plurality of items located at the first position to the plurality of sensors located at second positions (as recited in claims 15 and 6) (Briggs: col. 3, lines 61-67); further having sensor electronics (31) wherein each of the plurality of sensors is in electrical communication and made operational for sensing the presence of the analyte, with the sensor electronics at the second position (as recited in claims 24 and 25). Briggs further discloses that the electronic nose/sniffer can be made to sense many types of analytes (i.e. TCA) (Briggs: col. 4, lines 13-34). Briggs does not expressly disclose the testing of cork stoppers for the presence of an analyte, which causes wine taint (i.e. TCA, as recited in claim 27). Moura et al. teach the testing of cork stoppers for the presence/removal of a TCA analyte by passing a gas flow over the cork stoppers and the moving/turning of the stoppers several times to ensure the

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stoppers are exposed to the gas flow (Moura et al.: page 7, lines 24-28). It would have been obvious to one having ordinary skill in the art at the time the invention was made to test cork stoppers for the presence of TCA, as taught by Moura et al., utilizing the apparatus and method steps disclosed by Briggs, thus testing for the contamination of the cork stoppers for 2,4,5-trichloroanisole (TCA), reducing the sensory characteristics (i.e. "off aromas") damaging the wine in which the corks are utilized (Moura et al.: page 1, lines 10-27).

9. Claims 18, 19 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,435,002 to Briggs as applied to claim 13 above. Briggs discloses an apparatus for testing a plurality of items for the presence of an analyte having all of the elements stated previously, including a conveyor that conveys a plurality of items to the first position and a plurality of electronic noses/sniffers moved into and out of contact positions with the items for detecting the presence of the analyte, via multiple moving systems that repeatedly place items and sensors in close proximity to one another for testing. All such systems are common and well known in the art and common to industry for all types of automation and assembly line processes. Therefore, the employment of a flexible web (as recited in claim 18) including a plurality of receivers configured to receive one of the plurality of items to be tested (as recited in claim 19) or alternating the rotating system of Fig. 12 to a conveyor system, wherein the sensors are secured to the web are obvious variants of the apparatus disclosed by Briggs, and thus well within the purview of one of ordinary skill in the art to employ or make such changes based testing or manufacturing needs.

Allowable Subject Matter

10. Claims 11 and 12 are allowed over the Prior Art of record.
11. Claims 7, 8, 20 and 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is invited to review Prior Art related to the instant invention, cited by the Examiner on PTO form 892 submitted herewith.
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Fitzgerald whose telephone number is (571) 272-2843. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you


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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature, possibly "JF", in black ink.

JF

05/20/2005

A handwritten signature in black ink, appearing to read "Hezron S. Williams".

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800